# EFFECT OF OM CHANTING AND BHRAMARI PRANAYAMA VARIATIONS ON SELECTED PSYCHOLOGICAL PARAMETERS OF TEENAGED GIRLS

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# CERTIFICATE

I hereby declare that the synopsis **"EFFECT OF OM CHANTING AND BHRAMARI PRANAYAMA ON SELECTED PSYCHOLOGICAL PARAMETERS OF TEENAGED GIRLS"** being submitted for the degree of Doctor of Philosophy in Physical Education to Lakshmibai National Institute of Physical Education (LNIPE), Gwalior, during the academic year 2022-2023, is a bonafide record of original work carried out under the supervision of Dr. C.P. Singh Bhati and has not been submitted in full or part to any other university or institute for a degree or diploma.

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## ABSTRACT

The study aims to find out the effect of Om chanting and bhramari pranayama variations on selected psychological parameters (meta cognition, mental health and attitude towards yoga) of teenaged girls. For the study, it is hypothesised that there will be significant effect of om chanting and bhramari variables on selected psychological parameters of teenaged girls. For this study, 60 subjects (only teenaged girls) aged between 13-19 years will be selected randomly. There are total five groups: four experimental group and one control group (Group1 = OM Chanting variation1, Group2 = Om chanting variation2, Group3 = bhramari variation1 , Group4 = Bhramari variation2 and Control Group = No treatment). The following questionnaire will be used to obtain data from the individuals on specific psychological variables. Meta-cognition, mental health, and attitude towards yoga will be assessed using the meta-cognitive awareness scale, yoga attitude scale, and mental health battery. Expected outcomes: This study expects that variations of Om chanting and Bhramari pranayama will improve the mental well-being, metacognitive skills, and yoga attitudes of adolescent girls. In particular, it is anticipated that: Practicing these methods will result in reduced levels of anxiousness and stress as well as enhancing emotional health in general. Variations of Om chanting are supposed to enhance self-awareness and introspective thinking, whereas variations of Bhramari pranayama are expected to strengthen emotional regulation and cognitive control. A more positive attitude towards yoga and its incorporation into daily routines are likely to result from both practices.



Keywords: Yoga, Om chanting, Bhramari, mental health, meta-cognition,

Attitude towards Yoga

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# CHAPTER – I

## INTRODUCTION

Yoga is a very significant activity for teenagers in the present world. Teenagers' lives are extremely hectic and overflowing with ideas about their education, friendships, relationships, families, and a host of other topics. At this age, students struggle to make decisions. They may experience a variety of issues and difficulties on a mental, emotional, and physical level. To balance their body and mind, they must incorporate yoga into their everyday regimen. Teenagers who practise yoga can better understand their own ideas and guide them in the right path. Additionally, they are capable of making wise choices in risky circumstances, which might lessen their mental strain.

It has been demonstrated that chanting, especially techniques like mantra recitation and 'OM' meditation, provides major psychological advantages for teenage girls. These advantages include better social relationships, stress reduction, emotional control, and cognitive enhancement.

The Psychological Advantages of Chanting for Adolescent Females

1. Emotional equilibrium and stress reduction

Chanting techniques, such as repeating mantras aloud or silently, have been associated with lower cortisol and anxiety levels. Significant reductions in self-reported anxiety and cortisol levels were observed in a study including group chanting, especially when chanting audibly. This shows that chanting can help people feel less stressed and more stable emotionally.

2. Increased Focus and Cognitive Function

Chanting has been shown to enhance school-age children's executive functioning when incorporated into meditation programs. Chanting can improve attention and cognitive processing abilities, as seen by the participants' improved working memory, cognitive flexibility, and inhibitory control.

3. Better Mental Health and Wellness

Teenagers' psychological health significantly improved as a result of a study on 'OM' chanting meditation. Chanting's promise as a strategy for promoting psychological resilience was highlighted by the increases in mood, life satisfaction, and general mental health that resulted from regular practice.

4. Greater Altruism and Social

Chanting exercises in groups have been linked to more altruistic behaviour and improved social connectedness. Chanting can promote empathy and social cohesion, as evidenced by the participants' reports of closer relationships and a stronger sense of community.

Om is the fundamental sound and syllable of the cosmos. Usually, it appears at the start and finish of chapters in Hindu scriptures such as the Vedas and Upanishads, guaranteeing that learnt material is retained in memory (Jones & Ryan,2006),(Wilke & Moebus, 2011),(Parpola,1981). The Great Sound, also known as Maha Vakya or Pranav, is another name for OM. It is limitless and imperishable, like God Himself, and it permeates the entire creation. Bīja, or seed, is frequently appended to the start of Vedic mantras in Vedic philosophy, where it is known as the Vibration of the Vedas (Mukundananda, 2013). A collection of transcendental sounds called a mantra is intended to rid the mind of all types of fear. Mantra chanting can help us recover by releasing stored energy and returning to our natural resonance state (Dudeja, 2017). There are three ways to chant: Manasika japa (recited in the mind), Upamshu japa (whispering), and Vaikhari japa (said out) (Saraswati, 1981). In comparison to the resting state, chanting dramatically raises neural oscillations in the low frequency delta-band, especially in the posterior cingulate cortex, which influences heart activity, according to a study (Gao et al., 2019). Chanting has been shown to stimulate brain regions linked to self-awareness, cognition, and memory as well as alleviate symptoms of stress, mood, anxiety, sadness, and posttraumatic stress disorder. Create cardiorespiratory synchronisation as well (Peng et al., 2004; Perry et al., 2023; Pathak, 2022).

The regulation of the body's pranic energy, or life force, is known as pranayama. Pranic energy manifests physically as breath. The practice of pranayama involves controlling one's

breathing in order to preserve pranic energy. Pranic energy serves as a conduit between the mind and body. Thus, by controlling the pranic energy, pranayama practice may maintain the physical and mental well-being of the body. Swami Sivananda (1997)

Pranayama is beneficial to people's ability to balance their physical and mental well-being and played a significant part in this regard. The most popular pranayama among the subclasses of pranayama is the Bhramari pranayama. It has been demonstrated that yoga practice enhances a person's heart, lungs, and mind. It also helps people stay healthy by lowering stress in different systems, which is accomplished by raising vagal tone. An evidence-based study demonstrates that deep breathing yoga exercises combined with meditation improve memory, concentration, attention span, and general state of consciousness. In the current environment, where everyone is juggling a busy schedule and feeling stressed, using yoga to manage one's lifestyle has shown to be crucial.

The word "bhramari," which is derived from "bhramara," means "a black bee." The sound created during practice resembles the buzzing of a black bee. Regardless of age or gender, anyone may simply practise this kind of pranayama by following the slow breathing pattern that consists of short inspiration and extended expiration. Healthy participants should close their eyes and sit comfortably. Then take slow, deep breaths in and out via the nostrils. The person must chant or make humming noises as they exhale, which should come from the nostrils themselves, with the thumbs covering the ears and the lips closing the mouth.
People consistently experience a sense of mental renewal and enchantment when they practise bhramari pranayama.

Psychological benefits of bhramari:

1. Lessens Stress and Anxiety
    - The parasympathetic nervous system is triggered by the humming sound, which results in a relaxing reaction.
    - Helpful in reducing social anxiety, peer pressure, and exam stress.
2. Enhances Emotional Control

- The amygdala, the area of the brain that controls emotions and fear, is calmed by bhramari.
- Helps adolescent girls in managing mood swings or emotional outbursts, which are frequent as a result of hormonal changes.

3. Improves Memory and Focus

- Improves focus, learning, and academic achievement by increasing oxygen supply and reducing mental noise.
- Particularly beneficial for ladies who struggle with focus or exam anxiety.

4. Reduces Depressive Symptoms

- Frequent practice has been associated with better mood and decreased cortisol levels.

- Contributes to emotional well-being by increasing serotonin and dopamine activities.

5. Enhances the Quality of Sleep

- The soothing vibration eases insomnia or irregular sleep patterns, which are typical during puberty, by regulating the neurological system.

6. Promotes Confidence and Self-Awareness

- A positive self-image and inner serenity are fostered by mindful breathing, which is crucial during adolescence when self-esteem may vary.

Adolescence is a critical time for the development of metacognition, or "thinking about thinking," which is especially important for teenage girls. It entails understanding one's own thought patterns and how they affect learning and judgement. Girls' metacognitive skills develop during adolescence, giving them a better understanding of their own knowledge, learning preferences, and cognitive talents.

Students should overcome their nervousness and develop their cognitive abilities in order to perform better academically. In order to determine how yoga affected the cognitive processes of female teenagers who performed poorly academically, the current study was carried out.

Students frequently experience emotional tension, anxiety, and exhaustion. It seems impossible for today's students to lead a calm and stress-free life. He appears to be on the verge of catastrophe, enmeshed in a fast-paced, technological maelstrom. Academic stress or work pressure might be the cause of emotional difficulties. Newspapers, magazines, and other publications have reported on cases of despair, suicide, and criminal activity brought on by scholastic failure brought on by stress. Anxiety, phobias, irritability, and other mental health issues are becoming more prevalent every day.

In contemporary society, there are circumstances in which both success and failure share characteristics that cause stress because people are unaware of the common "sickness" that underlies certain student achievement outcomes, which causes stress and a sense of unwellness. A deeper comprehension of the elements that contribute to academic success could be beneficial to the student.

Mental health is defined as a state of well-being in which a person recognises their own potential, manages everyday stress, works effectively and efficiently, and contributes to their community (World Health Organisation, 2014). The purpose of this study is to assess Bhramari Pranayama's interventional impact on students' mental health. A total of sixty students enrolled in undergraduate programs at Dev Sanskriti Vishwavidyalaya, Haridwar, were chosen. Before and after the trial, a single group was given the mental health measure (Kamlesh Sharma 1996). The study's intervention variable was a 15-minute Bhramari Pranayam workout for 20 days. According to the results, the Bhramari Pranayama intervention had a significant impact on mental health, and post-study mental health levels were higher than pre-study levels. This indicates that Bhramari Pranayama offers a way to achieve personal tranquilly and contentment, cultivate a positive outlook, boost self-esteem, and ensure that the mind and body are in harmony.

## STATEMENT OF THE PROBLEM

The present study will focus on investigating the effect of Om chanting and Bhramari pranayama variations on selected psychological parameters of teenaged girls.

## OBJECTIVES OF THE STUDY

The objective of the study is to find out the effect of Om chanting and Bhramari pranayama on selected psychological and physiological variables of teenage girls. The following objectives will be set for the study:

- To find out the effect of om chanting variations on selected psychological variables of teenaged girls before and after the administration of tests.
- To find out the effect of bhramari pranayama variations on selected psychological variables of teenaged girls before and after the administration of tests.
- To find out the significant difference between the controlled group and the experimental group.
- To find out the significant changes in meta cognition, mental health and attitude towards yoga of teenaged girls before and after the administration of tests.

## HYPOTHESIS OF THE STUDY

It is hypothesized that

1. There may be significant effect of Om chanting variations before and after the intervention on selected psychological parameters (meta-cognition, mental health and attitude towards yoga) of teenaged girls.
2. There may be significant effect of Bhramari pranayama variations before and after the intervention on selected psychological parameters (meta-cognition, mental health and attitude towards yoga) of teenaged girls.

3. There may be significant difference between Om chanting variations on selected psychological parameters (meta-cognition, mental health and attitude towards yoga) of teenaged girls.
4. There may be significant difference between Bhramari pranayama variations on selected psychological parameters (meta-cognition, mental health and attitude towards yoga) of teenaged girls.
5. There may be significant effect ofogic intervention on selected psychological parameters (meta-cognition, mental health and attitude towards yoga) of teenaged girls when compared with the control group.

## DELIMITATION OF THE STUDY

The study is delimited to the following points:

- The study will be delimited to 60 school teenaged girls.
- The age group of the subject shall be delimited to 13-19 years.
- The study will be restricted to two different variations of Om chanting and bhramari.
- The treatment will be delimited to 10-12 weeks of training.
- The following Psychological variables were selected for the purpose of the study:
  - ✦ **Psychological Variables:**
  1. Meta-cognition
  2. Mental health
  3. Attitude towards yoga

## LIMITATION

The changes which were taken place in subjects because of their lifestyle, and Physical & Mental Workouts done by them outside the school, Environmental Conditions, and their Nutritional Habits will be the limitation of this study.

## SIGNIFICANCE OF THE STUDY

- This study may be benefited the teenaged girls to manage their stress and anxiety.
- The study may positively influence cognitive functions, particularly among adolescent girls.
- This present study may also aid the students to find out and analyse their strengths and weaknesses and to work on these areas.
- The study may be spread awareness about the yoga practice by enhancing their mental health and well-being.
- This research study would spread awareness about the benefits of Yogic intervention by enhancing the knowledge of the psychological aspects.

# CHAPTER II

## REVIEW OF RELATED LITERATURE

This chapter includes the reviews related to Om chanting and Bhramari on psychological variables with review analysis.

**Sunita, et al. (2022)** investigated the impact of meditation, pranayama, and yoga on mental health among female undergraduate medical students. 105 students were divided into control, meditation, pranayama, and yoga groups. Anxiety, depression, and anger significantly decreased after six weeks in all three intervention groups. The maximum effect was seen in the yoga group. A sense of well-being was improved after practising all types of interventions. Meditation was found to increase well-being to the highest level compared to pranayama and yoga. The study concluded that the introduction and sustained use of meditation, pranayama, and yoga programs may help reduce anxiety, depression, and anger and promote well-being.

**Verma, V., et al. (2022)** To study the effect of Om mantra chanting on Anxiety level of young adults. The study have selected 50 subjects (male and female age 18-25 years) and classified into two groups Experimental group (N=25) and Control group (N =25). After applying one month of Yogic intervention (Om Chanting) in experimental group only. Result show significant decrease in Anxiety level of young adults in experimental group but no any significant difference in control group was found. Which indicates a significant effects of Om Mantra chanting on anxiety level of young adults.

**Kuppusamy, M., et al. (2021)** conducted a randomised controlled study to investigate the impact of Bhramari pranayama practice on adolescents' normal simple reaction speeds. 520 adolescents in apparent good health were randomly assigned to the Bhr. P group (n = 260) or the control group (n = 260) after screening 730 eligible volunteers. The Bhramari Pranayama was performed three times a week for six months by the Bhr. P group. The Visual Reaction Time (VRT) and Auditory Reaction Time (ART) were measured both before and after practicing Bhr.P pranayama. The Bhr. P group's response times in both VRT (from 267.13 ± 52.65 to 249.87 ± 39.41 ms) and ART (from 237.42 ± 48.12 to 227.91 ± 34.60 ms)

considerably decreased after six months of practicing Bhr. P. Participants in the control group did not exhibit any such significant changes ($p > 0.05$). It was shown that RT shortening is a sign of better information processing and reflexes. Bhr. P's beneficial effect on response time can be used to improve teens' cognitive function and academic performance.

**Faustino, et al. (2019)** The Metacognition Self-Assessment Scale (MSAS) was created to evaluate several aspects of metacognition and has the potential to be useful in clinical neuropsychology and psychotherapy. Still missing, though, are studies on validity and reliability as well as other relevant metacognitive constructs. This study examines the relationship between metacognitive functions, meta-beliefs, and cognitive fusion, as well as the psychometric analysis of the MSAS in a cross-sectional design. 194 members of the general public (76% female) with an average age of 32 made up the sample.Good internal consistency and sufficient convergent/divergent validity were among the scale's satisfactory psychometric qualities. Negative meta-beliefs and mastery predicted the variance of cognitive fusion, but metacognition and cognitive fusion had a negative correlation. Personal discomfort and cognitive fusion had a negative correlation with the decentering-differentiation component. According to these findings, MSAS might be a valid instrument for evaluating metacognition in Portuguese people.

**Kavita, P. and Pandey, K. (2018)** The aim of the study is to evaluate how well Om chanting reduces academic anxiety in secondary and upper-secondary students. Supplies and Procedures: Using the Academic Anxiety Scale (AAS-SSSM), 80 students (ages 13 to 18) at Kamala Nehru Institute of Children Education Sultanpur were diagnosed with academic anxiety. For three months, participants in the intervention group chanted Om once a day at 7:30 at the Environmental Park Sultanpur, under the guidance of a yoga instructor. Outcomes Academic anxiety before to the intervention did not differ significantly between the groups. But after chanting Om for three months, there was a noticeable drop in academic anxiety. One effective method for reducing mental stress and improving memory is to recite Om aloud using a traditional style. To strengthen the case for traditional Om chanting and to advocate incorporating it into our daily lives, we need further thorough research.

**Ansari, (2018)** The purpose of the study was to compare the opinions of boys and girls in the eighth and ninth grades from the SSC and CBSE boards on yoga instruction. For the current study, 257 participants (139 men and 118 females), ages 13 to 16, who were enrolled in South Mumbai's CBSE (118 students) and SSC (139 students) Board schools, were randomly selected by the researcher using purposive sampling. Students' attitudes towards yoga instruction were investigated using the Yoga Attitude Scale (YAS), developed by Dr. Mahesh Kumar Muchhal. The respondent is required to rate their responses on a three-point scale for the thirty questions on the scale.Scores for the response are about 3 for agree, 2 for undecided, and 1 for disagree.The statistical study revealed significant differences in eighth-grade men' opinions towards yoga training between the CBSE and SSC boards, as well as between eighth- and ninth-grade pupils. As a result, the ideas that claimed there was no appreciable difference between eighth- and ninth-grade students' attitudes towards yoga training and between eighth-grade boys from the CBSE and SSC boards have no merit.

**Dhake, P. (2017)** This paper describes the yoga practices of a number of students at Smt. G.G. Khadse College in Muktainagar (M.S. Yoga is a multifaceted subject that has gained popularity all around the world in recent years.These days, yoga is described as a practice that promotes total well-being through personality development, awareness transformation, and integration within the human system. In addition to being the practice and teaching of yoga, yoga education may also be seen of as the application of yoga techniques to improve the educational process.The authors collected data from 96 male students who participated in a 6-day yoga course using purposive sampling. Yoga attitude is measured using the Yoga Attitude Scale developed by Dr. Mahesh Kumar Muchhal. The research hypothesis of the authors states that students in different courses will view yoga favourably. Norms-based grading was used to gauge the level of yoga attitude. The findings of the pilot study were very encouraging: 60% of students felt positively about yoga. Students are increasingly aware of yoga's greater importance for their better future.

**Himani, A. and Das, I. (2016)** The study was conducted to examine the effects of vocal OM chanting during meditation and prayer on the psychological well-being and emotional intelligence of 130 female university students, ages 18 to 24. There were 65 students in

Group I (prayer and meditation) and 65 students in Group II (just meditation) that made up the study's sample. For 30 days, Group I's daily intervention practice time was 15 minutes for prayer and 15-20 minutes for meditation, whereas Group II's daily practice time was 15-20 minutes. Pre-post data was collected for both groups before and following the intervention. The emotional intelligence pre-and post-test results showed a significant difference ($Z = 6.34$). The emotional intelligence pre- and post-scores differed significantly ($Z = 6.34$, $p < .01$ in Group I and $Z = 4.50$, $p < .01$ in Group II). Additionally, a significant difference ($Z = 4.43$, $p < .01$ in Group I) was observed between the pre and post-levels of psychological well-being. The psychological well-being Z value in Group II was found to be 1.94, which is not significant even at the .05 level. Therefore, prayer and meditation together have a very favorable impact on psychological health and emotional intelligence. Additionally, it was discovered that while meditation had no discernible impact on psychological wellness, it had a strong favourable influence on emotional intelligence.

**Parajuli, N., et al. (2022)** to evaluate how Surya Namaskara (SN) affected the mental well-being, self-discipline, and mindfulness of teenage schoolchildren. Participants in the study were sixty-three (39 female) grade nine pupils from a private school in India (mean age = 14.24 years, SD = 0.42 years). The current study was designed with a non-randomized two-arm design. Section B ($N = 30$) was designated as the control group, and Section A ($N = 33$) as the intervention group. For two weeks, SN was administered to the students in the intervention group. At baseline and two weeks into the intervention, the participants completed the General Health Questionnaire-12 (GHQ-12), Brief Self-control Scale (BSCS), and Mindfulness, Attention and Awareness Scale for Adolescents (MAAS-A) questionnaires. The study found that time significantly impacted MAAS-A scores and BSCS and MAAS-A scores within groups. The SN group outperformed the control group, demonstrating that SN enhances mindfulness and self-control in teenage schoolchildren, with no discernible difference in GHQ-12 scores.

**Anand, H. (2014)** The purpose of the study was to investigate how adolescents' psychological wellbeing is impacted by "OM" chanting meditation. The 'OM' chanting meditation required 20 minutes of practice over the course of a month. The 100 subjects in

the sample, 50 in each group, were chosen from Dayalbagh Educational Institute in Agra and ranged in age from 15 to 24. The "P.G.I. Wellbeing Scale" was used to measure psychological wellbeing. To increase the scale's validity, the researcher herself incorporated five additional items from the Life Satisfaction Test in addition to the P.G.I. Wellbeing Scale's questions. The impact of "OM" chanting meditation on psychological wellness was investigated using the t-test. The computed t-value for the experimental group, according to the results, was 5.59, which is significant at the 0.01 level. Even at the 0.05 level, the calculated t-value for the control group was determined to be 1.00, meaning it is not significant. The findings indicate that 'OM' chanting meditation significantly improves adolescents' psychological wellbeing.

# CHAPTER III

# METHODOLOGY

In this chapter, the procedure adopted for description and selection of subjects, selection of variables, criterion measures, administration of tests, collection of data, details of training protocol, statistical techniques employed for analysis of the data are presented.

## SELECTION OF SUBJECTS

For the study, 60 school teenage girls were selected randomly. The selected subjects will be divided equally into 5 groups (4 treatment group and 1 control group). Each group will comprise 12 subjects.

## SELECTION OF VARIABLES

For the study, selection of independent variables and dependent variables are the following:

**I. Independent variable:**

1. Om chanting:
   Variation 1:
   Variation 2:
2. Bhramari Pranayama:
   Variation 1:
   Variation 2:

**II. Dependent variable:**

1. Meta-Cognition
2. Mental Health
3. Attitude towards yoga

## CRITERION MEASURES

Criterion measures of the study are as follows:

| Sl. No. | Questionnaire | Authors |
|---|---|---|
| 1. | Meta-cognitive Awareness Scale | Punita Govil, Yogita Sharma and Swati Gupta |
| 2. | Mental Health Battery | A.K. Singh and Alpana Sen Gupta |
| 3. | Yoga Attitude Scale | Mahesh Kumar Muchhal |

## COLLECTION OF DATA AND ADMINISTRATION OF TESTS

The subjects will be divided equally into five groups i.e., treatment group-1, treatment group-2, treatment group-3 and treatment group-4 and control group- no treatment. Each group comprise of 12 subjects. Om chanting and Bhramari pranayama variations will be given as per the training schedule for 10-12 weeks. The pre-test and post-test data on the selected criterion variables were collected by administering the test as per the standardized procedures before and after 10-12 weeks of the training programme. Om chanting and bhramari pranayama variation 1 training will be given on alternate days (Monday, Wednesday and Friday at 7:00 am -7:30 am and 7:30 am - 8:00 am respectively) and om chanting and bhramari pranayama variation 2 will be given on alternate days (Tuesday, Thursday and Saturday at 7:00 am -7:30 am and 7:30 am - 8:00 am respectively).

## TRAINING OVERVIEW PROTOCOL

| Sl. No. | Groups | Training Protocol | Duration |
|---|---|---|---|
| 1. | Treatment group 1 (Om chanting 1) | **Preparatory practice:** Nadi Shodhan | 5 minutes |
| | | **Main practice:** Om chanting | 20 minutes |
| | | **Post-practice:** Breathing awareness | 5 minutes |
| | | **Total Duration** | 30 minutes |
| 2. | Treatment group 2 (Om chanting V2) | **Preparatory practice:** Nadi Shodhan | 5 minutes |
| | | **Main practice:** Om chanting | 20 minutes |
| | | **Post-practice:** Breathing awareness | 5 minutes |
| | | **Total Duration** | 30 minutes |
| 3 | Treatment Group 3 (Bhramari pranayama V1) | **Preparatory practice:** Nadi Shodhan | 5 minutes |
| | | **Main Practice:** Bhramari pranayama | 20 minutes |
| | | **Post Practice:** Breath awareness | 5 minutes |
| | | **Total Duration** | 30 minutes |
| 4 | Treatment Group 4 (Bhramari pranayama V2) | **Preparatory practice:** Nadi Shodhan | 5 minutes |
| | | **Main Practice:** Bhramari pranayama | 20 Minutes |
| | | **Post Practice:** Breath awareness | 5 minutes |
| | | **Total Duration** | 30 minutes |
| 5. | Control group | **No treatment** | Nil |

*For first week main protocol training will be of 10 minutes for the better adaptation of the protocol and rest of the training protocol followed will be of 20 mintutes.

## STATISTICAL ANALYSIS

For assessing the data of the study, descriptive statistics will be used. To find out the significant

difference among the different variations of Om chanting and Bhramari pranayama on selected psychological variables, Multivariate Analysis of Variance (MANOVA) test will be used at 0.05 level of significance in SPSS 20.

## EXPECTED OUTCOMES

- The study anticipates that om chanting variations will have a major impact on teenage girls' mental health.
- The findings anticipate that the significant effect of Om chanting variations on teenage girls' metacognition by enhancing their thinking of thinking.
- Om chanting and Bhramari pranayama variations are likely to have a favourable impact on teenage females' attitudes towards yoga, according to the study's anticipated findings.
- The study anticipates that practising variations of bhramari pranayama will positively influence metacognitive abilities in teenage girls by enhancing their self-awareness, cognitive control and reflective thinking.
- It is anticipated that bhramari pranayama variations will have a good impact on teenage girls' mental health. Especially, the study expects the results in the stress and anxiety reduction and improved emotional well-being.
- Teenage girls' cognition, mental health, and attitude towards yoga practice in their daily lives were expected to be significantly impacted by variations of Om chanting and Bhramari pranayama.

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